5

PCT/GB01/03461

16

## CLAIMS

1. A bearing arrangement comprising:

two bearing assemblies both located on the same axis;

each bearing assembly comprising two parts in contact during their relative rotation;

at each assembly the contact taking place in a respective plane;

10 characterised in that one of the assemblies allows resilient displacement of its contact plane and the other of the assemblies is relatively rigid for preventing substantial displacement of its contact plane.

15

2. A bearing arrangement as claimed in claim 1 wherein the displacement of the contact plane is allowed to take place only in a direction substantially parallel to the axis.

20

25

30

3. A bearing arrangement comprising:

two bearing assemblies both located on the same axis;

each bearing assembly comprising two parts in contact during their relative rotation;

at each assembly the contact taking place in a respective plane;

characterised in that at least one of the assemblies allows resilient displacement of its contact plane in a direction parallel to the axis.

4. A bearing arrangement as claimed in any of claims 1 to 3 wherein the two parts of each of the bearing assemblies include a female part having a recess or

30

17

aperture and a male part acceptable into the recess or aperture.

- 5. A bearing arrangement as claimed in any one of claims 1 to 3 wherein, at at least one of the said two assemblies the contact is sliding contact.
- 6. A bearing arrangement as claimed in claim 5 wherein the contact is between the female and the male parts of the bearing assembly or assemblies and is at discrete locations in the plane.
- 7. A bearing arrangement as claimed in claim 6
  wherein the discrete locations are provided by a non15 circular recess or aperture (e.g. triangular or
  trihedral) in the female part co-operating with a
  circular (for example spheroidal or conical) male part,
  or are provided by a circular (e.g. conical or
  straight-sided) recess or aperture in the female part
  20 co-operating with a non-circular (e.g. trihedral) male
  part.
- A bearing arrangement as claimed in claims 1 to 7 wherein at least one of the two parts is formed of a
   plastics material.
  - 9. A bearing arrangement as claimed in claim 8 wherein the plastics material is formed as an insert within an outer collar.

10. A bearing arrangement as claimed in any one of claims 1 to 3 wherein the contact is rolling contact

and the parts include a ball race.

18

- 11. A bearing arrangement as claimed in any preceding claim wherein the resilient displacement of the plane is provided by a resiliently movable female part.
- 5 12. A bearing arrangement as claimed in claim 11 wherein the female part includes a planar spring support.
- 13. A measurement probe support having a pivot
  10 including a bearing arrangement according to any one of claims 1 to 12.
- 14. A support for a measurement probe comprising an articulatable wrist providing two axes of rotation for the probe, at a first axis there being provided a bearing arrangement as claimed in any one of claims 1 to 10, the bearing arrangement being connected to a spindle having an extension extending beyond the bearing arrangement in the direction of the first axis.
  - 15. A support for a measurement probe as claimed in claim 14 wherein the extension is connected to a further bearing arrangement providing a second axis of rotation for the probe, transverse to the first axis.
  - 16. A support for a measurement probe as claimed in claim 15 wherein power and signal paths are provided and at least one of the paths crosses a rotary coupling disposed about the first axis.
  - 17. A support for a measurement probe as claimed in any one of claims 14 to 16 wherein the said bearing arrangement comprises a ball in a recess and the extension extends beyond the ball.

30

25

20